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HOUSEKEEPERS' CHAT — Thursday, April 8, 1937

(FOR BROADCAST USE ONLY)

Subject: "PREVENTABLE HOME FIRES." Information from the Bureau of Agricultural Engineering and the Bureau of Chemistry and Soils, U. S. Department of Agriculture, Washington, D. C.

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I wonder how many of my listeners have seen a neighbor's house burn down, or have themselves fled from a burning building? Fire is an experience that touches most of us in a large way or a small one at some time in our lives. And the pity of it is that even when no danger is involved, fire means waste--complete, irrevocable waste. Even if an insurance company stands behind you with money to replace what is destroyed, it cannot cover the loss of time, the loss of business, or the inconvenience caused by a serious fire. It cannot replace valuable records or possessions prized for their association, and no amount of insurance compensates for even one life lost in the burning of a home.

Engineers of the U. S. Department of Agriculture believe that many dwelling-house fires are preventable. It is true that in rural districts, where there is a high percentage of loss from fire, there is less protection maintained by the community. Neighbors who act as volunteer firemen are always willing to help. But remote houses and barns, especially when on poor roads, cannot be reached quickly. The water supply for fire-fighting may be inadequate. A fire in a frame building gains headway rapidly.

So it is especially important where these rural fire hazards are great to take precautions in building homes and other structures and to give thorough, frequent inspection, to make sure there is no unconsidered source of fire-danger anywhere. It is up to home-owners to train every member of the household to be on the alert for fire hazards as well as the actual starting of a blaze. Children can be taught to let matches alone, and matches can be kept out of their reach. Hired workers both within and without the house can be reminded of the necessity for care about fire. Warnings against smoking might be plainly posted around the barn, hay mow, garage and other points of fire danger.

While it is easier to build a new house with fire-resistive construction than to alter one already built, the engineers say there are some preventive measures that can be taken at no great cost. Some of my women listeners may think that the way a house is built or improved is a man's matter that does not concern them. But every alert intelligent woman wants to understand as much as possible about the way her home is built so as to be able to discuss improvements and direct them if necessary.

As we women know only too well, a good many fires start down cellar. One reason is that the heating equipment and fuel are usually in the basement. Fuel is stored there. In many cellars people allow trash and papers to accumulate until they can be conveniently disposed of. They carelessly store oily rags used for polishing or painting. Spontaneous ignition may set these off even when there is no fire in the furnace. Once started, a cellar fire may gain considerable headway before it is noticed.

The first protective measure recommended by engineers is a floor of fire-resistive construction above the cellar. If this is not practicable because of cost, there are several ways of improving the fire resistance of the cellar ceiling. One is to plaster it with fibered or sanded gypsum plaster or Portland cement plaster on metal lath. Another is to cover the joists in with strong fire resistive plaster board at least half an inch thick and coated with gypsum plaster. The ceiling should be finished tight against outer walls, sills and girders. The walls and ceiling of the cellar stairway should be finished in the same manner.

The cellar stairs should be cut off at the top by a metal-lined door. If possible the upper stairs should also be enclosed with top and bottom doors for safety, as an open stair-well is one of the first pathways taken by a fire.

Next in importance from the fire-protection standpoint is fire-stopping at the cellar ceiling level. All the open spaces in the walls should be blocked off. These flue-like passages between outside and inside walls act exactly like chimneys when fire gets into them. Hot gases and smoke, followed quickly by flame, are rapidly carried to the upper floors. Even when discovered, a fire in the studding spaces is hard to put out.

Fire stopping consists in shutting off all these openings or passages in walls and floors with wooden blocks, or with incombustible material supported on metal. The added cost of this protection is slight, and yet its value is so little appreciated that the average dwelling has no fire-stopping at all.

Fire stops should fit well to afford maximum protection. However, it is easily possible to correct defects in the fit of the stopping in new houses by covering the top of the stopping with a 3 or 4 inch layer of incombustible material. This may be broken-up refuse mortar or plaster, mineral wool, concrete, old brick, cinders, or a mixture of sand and gravel. The loose material will settle and tend to fill spaces caused by poor workmanship or shrinkage of the timber. Strips of metal lath or sheet metal are sometimes preferred to wooden stops.

All wooden construction next to chimneys should be kept at least 2 inches away from the brick work. If the frame holds up part of the chimney and the lower part settles, dangerous cracks may open up. The chimney is one of the danger points of any house. More fires are attributed to defective flues and stove pipe connections than to any other single cause. All new flues should be lined with flue lining, but in any event chimneys should be inspected from time to time and any joints in which openings or cracks have appeared should be repaired.

Stove pipes should be kept at least 12 inches away from wooden construction and should never pass through floors or closets. If it is necessary to run a stove pipe through a partition it should be protected with a ventilated or insulated metal thimble.

Fire resistive roof coverings should be used wherever possible. Sparks on roofs often start fires. Lightning is another frequent cause of fires on unrodded structures. The protection afforded by lightning rods has been thoroughly demonstrated. It is a good precaution to have a chemical fire extinguisher on hand in a convenient location.

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